NWC ESSAY 91-1

Water or War

Resolving The Middle East Water Crisis

Course Three Geostrategic Context Seminar A

LTC Tony J Buckles 25 February 1991

NAVIGERAL I DE CENTRALIA SE SALESTAY

maintaining the data needed, and of including suggestions for reducing	election of information is estimated to completing and reviewing the collect this burden, to Washington Headqu and be aware that notwithstanding ar OMB control number.	ion of information. Send comments arters Services, Directorate for Info	regarding this burden estimate rmation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington		
1. REPORT DATE 25 FEB 1991		2. REPORT TYPE		3. DATES COVE	RED		
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER					
Water or War Res		5b. GRANT NUMBER					
					5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER			
		5e. TASK NUMBER					
			5f. WORK UNIT NUMBER				
7. PERFORMING ORGANI National War Coll McNair, Washingto		8. PERFORMING ORGANIZATION REPORT NUMBER					
9. SPONSORING/MONITO		10. SPONSOR/MONITOR'S ACRONYM(S)					
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)					
12. DISTRIBUTION/AVAIL Approved for publ	LABILITY STATEMENT lic release; distributi	ion unlimited					
13. SUPPLEMENTARY NO	OTES						
14. ABSTRACT see report							
15. SUBJECT TERMS							
16. SECURITY CLASSIFIC	17. LIMITATION OF	18. NUMBER	19a. NAME OF				
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	- ABSTRACT	OF PAGES 14	RESPONSIBLE PERSON		

Report Documentation Page

Form Approved OMB No. 0704-0188

SUMMARY

The potential for conflict in the Middle East is well known. In the past, arguments have centered on land and oil. The current crisis involving the invasion of Kuwait by Iraq is only the latest example of the confrontations bubbling under the surface over boundary disputes in the region. Unfortunately, boundary disputes are not the only problems facing the peace maker in this region. Looming on the horizon is a much larger and involved issue—water.

The potential for conflict over this critical resource extends beyond the immediate region and includes many additional players--Turkey, Sudan, Ethiopia, and Libya come readily to mind. Additionally, the time available to overt this pending calamity is running out.

In addressing this issue, I will review the nature of the problems to be resolved in the major water basins in the region.

The United States must move now to establish its policy on the issues to be addressed in the region once the Iraq/Kuwait conflict is settled. Water management/sharing must be taken into account as a part of that strategy if we are to make any progress in establishing a lasting peace in the area.

ISSUE DEFINITION

Potential conflicts could arise at any time over the control of water. Presently, the resolution of the disputes are being pursued in a bilateral approach keyed to the countries sharing water along the three major water basins of the region. While some discussion of the water problem has drawn the attention of the United Nations and the World Bank, no real attempt to deal with the issue in a regional/trans-regional fashion has surfaced. One approach is to treat water as a resource covered by sovereignty of the nation within who's boundaries it originates. The other view is that water must be shared based on need and historical precedents with those countries living down stream.

BACKGROUND AND ANALYSIS

There are fifteen countries using the water carried by the Nile. Euphrates, and Jordan, each attempting to improve its own lot. Falling water tables, exploding populations, domestic politics, the absence of any type of coordinated water policy, page management, pollution, westered regional disputes are just a few of the challenges swalting

resolution. The two aspects of water management mentioned earlier can be best illustrated by looking at the Nile basin for the shared approach, and the Euphrates as an example of the sovereignty view.

NILE

BACKGROUND

Egypt is the focal point for the situation in the Nile. With the Blue Nile originating in Ethiopia and the White Nile headwaters in Sudan, Egypt finds itself depending on a water source potentially controlled by two other countries. The magnitude of that dependence can be seen in the following:

- * Egypt relies on Nile for majority of water(80-90%)
- * Egypt's population currently approx. 56 million
- * Egypt's population growing at a rate of 1 million/9 months
- * Egypt's Population projected to 85 million by 2010
- * Only 3.5% of Egypt's land is reclaimed
- * Egypt imports over 60% g_{π} its

[&]quot;Middle East Faces Major Water Woes", Caryle Murphy, 10 Mar 90, The Washington Post

Present arrangements between Egypt, Sudan, and Ethiopia treat the Nile as a shared resource. Egypt and Sudan have an agreement dating from 1959 assuring a flow of 2/3'd of the Nile to Egypt at the Aswan Dam.

While there are no formal arrangements with Ethiopia, Egypt has been successful at intimidating the leadership in Addis Ababa to not interrupt the flow of the Nile's headwaters without prior approval from Cairo. As a result, development projects in Ethiopia are designed with the potential impact on Egypt taken into account. A recent program to obtain loans from the African Development Bank to build irrigation canals was first discussed with Egypt. Ethiopia has indicated a willingness to consult with Egypt on all water related projects prior to construction in return for Egyptian support on the ADB loan.

ANALYSIS

The Nile basin is the best candidate for a constructive and equitable water sharing program. The program would be based on a regional approach that would also recognize the internal problems of each of the three participants. All three countries already recognize their shared concerns over the water of the Nile. In order to build on this, a regional

organization should be established to reach agreement on the water requirements and development strategies of each country. A review board would be available to rule on requests for modifications to allocations or alleged violations of agreements. All projects involving the Nile would have to be reviewed to determine the impact on the other members.

Egypt will face the greatest challenges internally. A 13 March 1990 article by Zaki al-Sa'dani in the Cairo AL WAFD outlined the four challenges facing Egypt in the nineties: First, population and resources: second, water and agricultural development; third, energy and development; fourth, the creation and transfer of technology within Egypt. All but the last one are directly tied to water management.

The magnitude of these challenges will require outside assistance. This can come from other Arab countries in the Gulf region or from the United Nations. What will be critical is the synchronization of any loans within the parameters of the regional water commission. The first requirement for obtaining funding should be an impact assessment from the regional water commission

EUPHRATES

BACKGROUND

Circumstances surrounding the relationships of Turkey, Syria, and Iraq over the use of the Euphrates are some what different from that of the Nile basin. Turkey, which controls the Euphrates, views the river as a natural resource. George D. Moffett, writing in the 13 March 1990 Christian Science Monitor, captures the essence of the Turkish attitude: "Upstream countries like Turkey insist that they are under no more obligation to give away their water than, say Saudi Arabia is to give away its oil."

The dependence on the Euphrates is greater in Syria than Iraq, which has the Tigris River. Both would be adversely effected by a loss of flow in the Euphrates:

- * Syria is almost totally dependent on the Euphrates.for irrigation and power
- * Any reduction in flow of the river cuts into the generation of electricity in both countries
- * Turkish water projects could reduce Syria's flow by 40% and Iraq's share of the Euphrates by 80%

[&]quot;Middle East Faces Major Water Woes", Caryle Murph, 10 March

* Syria and Iraq projected significant shortfalls in water in the next ten years

Another complicating factor has been the tendency for Turkey to hint at using the flow of the Euphrates as a weapon. Statements by Turkish officials have warned Syria to refrain from assisting Kurdish guerrillas in Turkey, or to expect a loss in water supplies. Turkey has also let it be known that it has little interest in forming any sort of basin-wide water agreements. All of this while pursuing an aggressive hydro-electric dam project - the Grand Anatolian Project (GAP).

The first stages of filling the Ataturk required the halting of the Euphrates for thirty days. Projections are that a minimum of four years will be required to fill the Ataturk, barring any major drought. Syria and Iraq have protested the project.

ANALYSIS

Differences in the Euphrates basin involve issues other than water. Political differences involving the Kurdish population must also be addressed prior to any agreement on

^{1990,} The Washington Post

water sharing. This could possibly be the catalyst for a regional approach to water management. Turkey must be convinced that there is something in it for her to work with the Syrians and Iraqis towards a development policy for the Euphrates.

It is unlikely that Turkey would halt the GAP, therefore any discussions must also address a schedule for the completion of the project which takes into account the impact on Syria and Iraq. One consideration here would be to share the hydro-electric power resulting from the project. In addition, Turkey could take steps to safeguard against any downstream pollution resulting from construction or used irrigation water runoff.

Ideas put forth in the Damascus AL-THAWRAH by Mustafa al-Miqdad,16 December 1989 go even further. He proposes a regional approach to exploiting underground water, recycling of waste water and irrigation water, along with engaging in regional and international cooperation on water studies.

Iraq's situation in Kuwait has overshadowed the discussions on water policies for the present in Iraq.

Turkey, however, is looking to a post-Gulf War scenario. It is the Turkish government's view that regardless of the fate

of Saddam Hussayn, a new rapprochement between Syria and Iraq will occur resulting in a more unified stand towards Turkey and the use of the Euphrates.

RECOMMENDATIONS

The first requirement must be the resolution of whether water is a natural resource of the country controlling the headwaters or something to be shared. This has global implications and should be answered in the United Nations. Other international organizations would support this effort. Financial institutions could withhold loans for development until U.N. approval had been obtained.

Secondly, the issue must be addressed from a local, regional, trans-regional, and global perspective. Water concerns in the Middle East run from Turkey to Ethiopia, impacting on all the countries in between. To deal with the problem by region/river basin only, will lead to future conflicts. One example of this would be the proposed sale of water to Israel by Turkey.

Third, common standards of water management must be developed for use in all of the Middle Eastern countries.

These standards should include such things as water treatment

standards, land reclamation and irrigation quotas, conservation programs, shared water monitoring information, and local enforcement of water policies in support of regional agreements.

The fourth requirement is the creation of an administrative system to coordinate regional and trans-regional policies. I see two separate agencies--one geared to the respective river basin, and a second to deal with trans-regional questions. The role of the trans-regional organization would be to resolve complaints between regional authorities. This mid-level agency could also rule on appeals to regional findings.

Fifth, impact reviews must be obtained on any new development program prior to initiation. This would also include the drilling of any additional wells to pump groundwater.

Sixth, a detailed assessment must be made to determine the relative water needs and potential water development capability of the countries involved. As an example, Egypt has a larger need for water than Sudan because of population differences. Coastal countries have the ability to pursue desalination of sea water, where inland countries do not.

Finally, quotas must be agreed to which allow for equitable economic growth. Industrial and agricultural

development must be considered in light of regional growth.

This will be one of the more significant challenges. No longer will countries at the headwaters be able to expand at the expense of their downstream neighbors.

STRENGTHS

The proposals outlined in my recommendations are comprehensive, fair, and achievable. The framework for administering water policies along with the necessary tools to withhold financial support and international sanction of local projects in violation of established procedures, are all there. The scope of the problem is well known to all the regional players. No one has sufficient water to go it alone. The current crisis involving Iraq and Kuwait can provide the start point for getting down to business on serious water management in the region. For the first time ever, former foes find themselves cooperating against a common threat -- and under the U.N. umbrella. The new opportunities available as a result of the end to the bipolar world of the cold war era also improves the odds for success. This is the time for a "new world order" approach to the region. The United States will never find itself in a better position to raise the issue than during the post-Gulf war

peace settlement. If water rights are not included, we may loose a chance to establish a lasting peace in the area.

WEAKNESSES

The ideas outlined in this paper assume a desire on the part of all participants to forgo a portion of their own interests for the common good and advancement of all. I have not addressed the impact of religious differences, minority abuses, boundary disputes, or various other grudges. These are powerful arguments for failure. There are several other assumptions that must be met: the Gulf crisis ends with the coalition in tact; Israel has stayed out of the conflict; some form of Islamic radical backlash does not take place; and the current leadership of the coalition remain in power. The failure of any one of these assumptions could doom the region to continue its march to confrontation over water.